

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 2 of 15

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) An air conditioner comprising:

a condenser which generates a capable of rejecting high temperature heat from a refrigerant within said air conditioner to an external heat sink;

an evaporator which absorbs an external heat from a heat source, wherein said heat source includes external air, and forms condensed water from said external air is capable of being formed on a surface of said evaporator thereof by a temperature difference with an the external air; and, and,

a condensed water self disposal means device for transferring the condensed water on the surface of the condenser to a condenser side evaporator to an external surface of the condenser, and evaporating the condensed water from the surface of the condenser by the high temperature heat from the condenser, thereby disposing of the condensed water within the air conditioner itself, wherein the condensed water self disposal device includes

a guide flow passage for guiding the condensed water formed at the evaporator to the external surface of the condenser, and

a condensed water spraying unit provided for spraying the condensed water guided from the guide flow passage onto the external

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 3 of 15

surface of the condenser, wherein the condensed water spraying unit includes

a motor with two degrees of freedom over the condenser having a shaft for making rotating and linear movement,

a heat dissipation fan coupled with the motor shaft for rotating when the motor is in operation, and

a pump part provided at an end of the motor shaft for introducing the condensed water into the guide flow passage, and supplying the condensed water to an upper part of the heat dissipation fan, by the linear movement of the motor shaft when the motor is in operation.

2. (CANCELLED)

3. (CANCELLED)

4. (CURRENTLY AMENDED) An air conditioner as claimed in claim 3 1, wherein the pump part includes;

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 4 of 15

a hollow body connected to the guide flow passage for receiving the condensed water, and having a hole for movably inserting an end of the motor shaft,

a piston at one end of the motor shaft for making a linear motion with the motor shaft when the motor is in operation for drawing the condensed water from the guide flow passage, and pressing the condensed water in the hollow body, and

a supply tube connected to the body for supplying the condensed water to an upper part of the heat dissipation fan by a pressing force of the piston.

5. (CURRENTLY AMENDED) An air conditioner as claimed in claim 4, wherein the piston includes; includes:

a through hole for passing the condensed water, and

a closing member for opening/closing the through hole to generate generating a pumping force in a piston up/down movement direction of the piston.

6. (ORIGINAL) An air conditioner as claimed in claim 5, wherein the closing member is hinged on a bottom surface of the piston for opening the

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 5 of 15

through hole when the piston moves upward, and closing the through hole when the piston moves downward.

7. (ORIGINAL) An air conditioner as claimed in claim 6, wherein the guide flow passage is connected to the body at a position above a top dead center of the piston, and the supply tube is connected to the body at a position below a bottom dead center of the piston.

8. (ORIGINAL) An air conditioner as claimed in claim 5, wherein the closing member is hinged on an upper surface of the piston for closing the through hole when the piston moves upward, and opening the through hole when the piston moves downward.

9. (ORIGINAL) An air conditioner as claimed in claim 8, wherein the guide flow passage is connected to the body at a position below the bottom dead center of the piston, and the supply tube is connected to the body at a position above a top dead center of the piston.

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 6 of 15

10. (CURRENTLY AMENDED) An air conditioner as claimed in claim 3
1, wherein the heat dissipation fan is arranged over the compressor, and the condenser is bent around the heat dissipation fan and the compressor.

11. (ORIGINAL) An air conditioner as claimed in claim 10, further comprising a water proof cover on the compressor for preventing infiltration of water into electric fittings above the compressor.

12. (NEW) An air conditioner comprising:

a condenser capable of rejecting high temperature heat from a refrigerant within said air conditioner to an external heat sink;

an evaporator which absorbs an external heat from a heat source, wherein said heat source includes external air, and condensed water from said external air is capable of being formed on a surface of said evaporator by a temperature difference with the external air; and,

a condensed water self disposal device for transferring the condensed water on the surface of the evaporator to an external surface of the condenser, and evaporating the condensed water from the surface of the condenser by the high temperature heat from the condenser, thereby disposing of the condensed

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 7 of 15

water within the air conditioner itself, wherein the condensed water self disposal device includes

a condensed water spraying unit provided for spraying the condensed water onto the external surface of the condenser, wherein the condensed water spraying unit includes

a motor being positioned over the condenser and having a shaft,

a heat dissipation fan coupled with the motor shaft for rotating when the motor is in operation, and

a pump part connected to the motor shaft for introducing the condensed water into the guide flow passage, and supplying the condensed water to an upper part of the heat dissipation fan.

13. (NEW) An air conditioner as claimed in claim 12, wherein the pump part includes;

a hollow body for receiving the condensed water, and having a hole for movably inserting an end of the motor shaft,

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 8 of 15

a piston at one end of the motor shaft for making a linear motion with the motor shaft when the motor is in operation for drawing the condensed water, and pressing the condensed water in the hollow body, and

a supply tube connected to the body for supplying the condensed water to an upper part of the heat dissipation fan by a pressing force of the piston.

14. (NEW) An air conditioner as claimed in claim 13, wherein the piston includes:

a through hole for passing the condensed water, and
a closing member for opening/closing the through hole to generate a pumping force in a up/down movement direction of the piston.

15. (NEW) An air conditioner as claimed in claim 14, wherein the closing member is hinged on a bottom surface of the piston for opening the through hole when the piston moves upward, and closing the through hole when the piston moves downward.

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 9 of 15

16. (NEW) An air conditioner as claimed in claim 15, wherein the supply tube is connected to the body at a position below a bottom dead center of the piston.

17. (NEW) An air conditioner as claimed in claim 14, wherein the closing member is hinged on an upper surface of the piston for closing the through hole when the piston moves upward, and opening the through hole when the piston moves downward.

18. (NEW) An air conditioner as claimed in claim 17, wherein the supply tube is connected to the body at a position above a top dead center of the piston.

19. (NEW) An air conditioner as claimed in claim 12, wherein the heat dissipation fan is arranged over the compressor, and the condenser is bent around the heat dissipation fan and the compressor.

Docket No. 0465-1042P

Appl. No.: 10/624,523

Art Unit: 3744

Amendment dated May 27, 2004

Reply to Office Action of March 9, 2004

Page 10 of 15

20. (NEW) An air conditioner as claimed in claim 19, further comprising a water proof cover on the compressor for preventing infiltration of water into electric fittings above the compressor.